BPA Causes Confusion, Study Say



<u>Steven Hentges, Ph.D</u> Wednesday, August 15, 2018 in <u>SAFETY</u>

That headline isn't entirely correct. As far as I know there are no studies reporting that BPA causes confusion. But it is certainly true that BPA is a confusing subject, and you're forgiven if you've been confused by what you've read about BPA over recent years.

On one hand, the European Food Safety Authority (EFSA) <u>concluded</u> that "*BPA poses no health risk to consumers of any age group (including unborn children, infants and adolescents) at current exposure levels.*" That conclusion was the result of a comprehensive scientific evaluation conducted by a panel of experts commissioned by EFSA.

Put more simply, BPA is safe, which is exactly what the U.S. Food and Drug Administration (FDA) says on its website based on its own comprehensive evaluation: "<u>Is BPA safe? –</u> <u>Yes.</u>" A recent <u>statement</u> from FDA on the <u>CLARITY study</u> noted: "*our initial review supports our determination that currently authorized uses of BPA continue to be safe for consumers.*" The CLARITY study was conducted by FDA senior scientists in FDA's laboratory to resolve remaining uncertainties about the safety of BPA.

So far so good; there's not much confusion about what EFSA and FDA have to say about BPA. And they're not the only ones. <u>Government authorities around the world</u> say similar things, each based on its own evaluation of BPA.

But here's where it gets confusing. On the other hand, the European Chemicals Agency (ECHA) concluded that BPA is a "Substance of Very High Concern" (<u>SVHC</u>). How can it be that BPA is safe and a SVHC at the same time? Is one of them wrong?

The reason for the discrepancy is that ECHA is doing something quite different from FDA and EFSA. The discrepancy is so large that you might even say that ECHA is not telling you the whole story. Even worse, they're not telling you the part of the story that may be most important for consumers.

Both EFSA and FDA evaluate the safety or risk of a chemical in the way that you actually may be exposed to that chemical. The evaluation starts with consideration of hazards, which are intrinsic properties of a chemical that are independent from how, or even if, anyone contacts that chemical. Importantly then, safety or risk evaluations also include consideration of exposure, in particular the level of the chemical that consumers actually experience.

Considering exposure is very important. To illustrate why, you can safely eliminate your headache by taking two aspirin. But taking a whole bottle of aspirin will almost certainly harm you, perhaps even take your life. Aspirin is safe (i.e., very low risk) at the levels that consumers normally experience. It may not be safe if you take too much, but that's not really a concern for typical exposures.

In contrast, ECHA's conclusion on BPA is based only on an assessment of hazard properties without any consideration of typical consumer exposure. By itself that conclusion may be of some academic interest, but it is incomplete and not particularly informative for consumers since it completely overlooks the well-established fact that <u>human exposure to BPA is extremely low.</u>

What we most care about is the safety of a substance under the conditions of typical human exposure. In other words, is it safe or does it present a risk when we use it? The answer to that question for BPA, as <u>clearly stated by FDA</u>, is yes – BPA is safe. In that light, it might be more appropriate to designate BPA as a Substance of Very Low Concern (SVLC), meaning there is a very sound scientific basis to support its safety.